

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A silicon/silicon carbide composite comprised of 45 to 75 weight % of silicon and 25 to 55 weight % of silicon carbide, said silicon carbide ~~being formed from~~ consisting essentially of an assembly of fibers each having a thickness of 150 μ m or less and a length of 0.8 to 3.5 mm, said composite having a surface on which a silicon carbide film having a thickness of 30 to 500 μ m is formed.
2. (Currently Amended) A silicon/silicon carbide composite according to claim 1, wherein said silicon/silicon carbide composite contains carbon left without reaction therein in an amount of 0.25 % by weight or less ~~includes a silicon carbide film having a thickness of 30 to 500 μ m formed on a surface thereof.~~
- B2 3. (Currently Amended) A silicon/silicon carbide composite according to claim 1, wherein said silicon/silicon carbide composite ~~includes a dummy wafer with a~~ contains the silicon carbide film having a thickness of 30 to 150 μ m formed on the surface thereof, said to form a dummy wafer having a total thickness of 0.5 mm to 1 mm.
4. (Currently Amended) A silicon/silicon carbide composite according to claim 1, wherein said silicon/silicon carbide composite ~~includes~~ is a semiconductor heat treatment member.
5. (Currently Amended) A silicon/silicon carbide composite ~~according to claim 3~~ consisting essentially of 45 to 75 % by weight of silicon and 25 to 55 % by weight of silicon carbide, said silicon carbide consisting essentially of an assembly of fibers each having a thickness of 150 μ m or less and a length of 0.8 to 3.5 mm, said composite having a surface on which a silicon carbide film having a thickness of 30 to 500 μ m is formed wherein said silicon/silicon carbide composite includes a semiconductor heat treatment member.
- a/p 6. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite comprising a first step in which cellulose fibers each having a fiber thickness of 150 μ m or less are heated

at a temperature of 500°C to 1500°C in a non-oxidizing atmosphere to obtain a porous carbon body having a bulk density of 0.10 to 0.80 g/cm³;

and a second step in which said porous carbon body is silicified in an atmosphere containing silicon.

¹⁰
1. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ⁹6, wherein said thickness of each cellulose fiber is within a range of 5 to 80 μm.

¹¹
8. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ⁹6 or ¹⁰7, wherein the length of each cellulose fiber is 1.5 mm or more.

B2 ¹²
9. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ⁹8, wherein said cellulose fiber is paper pulp.

¹³
10. (Withdrawn) A process of manufacturing a silicon/silicon carbide composite according to claim ¹¹8, wherein said cellulose fiber is paper pulp.

¹⁴
11. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ⁹8, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.

¹⁵
12. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ⁹6, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

¹⁶
13. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ¹¹8, wherein a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

¹⁷
14. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ¹⁴11, wherein a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

¹⁸
~~15~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~8~~⁹, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

¹⁹
~~16~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~8~~¹¹, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

²⁰
~~17~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~12~~¹⁵, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

⁶
~~18~~. (Currently Amended) A silicon/silicon carbide composite according to claim ~~2~~⁵, wherein said silicon/silicon carbide composite ~~includes~~ is a dummy wafer with a the silicon carbide film having a thickness of 30 to 150 μm formed on the surface thereof, said dummy wafer having a total thickness of 0.5 to 1 mm.

⁷
~~19~~. (Currently Amended) A silicon/silicon carbide composite according to claim ~~2-5~~, wherein said silicon/silicon carbide composite ~~includes~~ is a semiconductor heat treatment member.

²¹
~~20~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~7~~¹⁰, wherein the length of each cellulose fiber is 1.5 mm or more.

²²
~~21~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~7~~¹⁰, wherein said cellulose fiber is paper pulp.

²³
~~22~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~7~~¹⁰, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.

~~23~~ ²⁴ (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~10~~ ¹³, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.

~~24~~ ²⁵ (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~7~~ ¹⁰, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

~~25~~ ²⁶ (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~10~~ ¹³, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

~~26~~ ²⁷ (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~7~~ ¹⁰, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

~~27~~ ²⁸ (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~10~~ ¹³, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

~~28~~ ²⁹ (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~13~~ ¹⁶, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

~~29~~ ³⁰ (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~14~~ ¹⁷, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

B2 80. (New) A silicon/silicon carbide composite according to claim 5, wherein said silicon/silicon carbide composite contains carbon left without reaction therein in an amount of 0.25 % by weight or less.
